

What is claimed is:

1. A wet clean station, comprising:

a bath configured to remove particles from a wafer, said bath arranged to receive pure water or chemicals;

5 fixing guides disposed on an outside of the pure water bath to fix optical fiber sensors thereto;

gas supply pipes configured to receivingly engage the optical fiber sensors; and

purge output holes formed at predetermined locations on the fixing guides.

10 2. A station according to claim 1, wherein said bath is further configured to discharge waste water after removing the particles from the wafer.

15 3. A station according to claim 1, wherein the fixing guides are disposed above and below the bath, respectively.

20 4. A station according to claim 1, wherein the fiber sensors are inserted into the fixing guides, one fiber sensor emits light, and the other fiber sensor receives light.

25 5. A station according to claim 1, wherein the purge output holes prevent the fiber sensors from being separated from the fixing guides when N₂ gas is supplied through the gas supply pipes.

6. A station according to claim 5, wherein the purge output holes discharge dew that is formed on the inner surface of the fixing guide using a pressure of the N₂ gas.

7. A method for preventing operation errors in a semiconductor fabrication system, said method comprising:

providing a cleaning station comprising an optical sensor unit;

arranging the optical sensor unit to detect the presence of a wafer in the cleaning station;

discharging excess moisture from the optical sensor unit to prevent errors in a sensing operation.

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8. A method according to claim 7, wherein the optical sensor unit comprises a fixing guide attached to the outside of the cleaning station, a gas supply pipe disposed at least partially within the fixing guide, and an optical sensor disposed at least partially within the gas supply pipe.

9. A method according to claim 8, wherein the fixing guide further comprises one or more purge output holes configured to discharge excess moisture.

10. A method according to claim 7, further comprising discharging excess pressure from the optical sensor unit to prevent unwanted separation of optical sensor unit components.

11. A method according to claim 10, wherein the optical sensor unit comprises a fixing guide attached to the outside of the cleaning station, a gas supply pipe disposed at least partially within the fixing guide, and an optical sensor disposed at least partially within the gas supply pipe.

12. A method according to claim 11, wherein the fixing guide comprises one or more purge output holes configured to discharge excess pressure from the optical sensor unit to prevent unwanted separation of the fixing guide and the gas supply pipe.

13. A method for preventing operation errors in a semiconductor fabrication system, said method comprising:

providing a cleaning station comprising an optical sensor unit;
arranging the optical sensor unit to detect the presence of a wafer in the cleaning
station;
discharging excess pressure from the optical sensor unit to prevent unwanted
5 separation of optical sensor unit components.

14. A method according to claim 13, wherein the optical sensor unit
comprises a fixing guide attached to the outside of the cleaning station, a gas supply pipe
disposed at least partially within the fixing guide, and an optical sensor disposed at least
10 partially within the gas supply pipe.

15. A method according to claim 14, wherein the fixing guide further
comprises one or more purge output holes configured to discharge excess pressure.

16. A method according to claim 13, further comprising discharging excess
15 moisture from the optical sensor unit to prevent errors in a sensing operation.

17. A method according to claim 16, wherein the optical sensor unit
comprises a fixing guide attached to the outside of the cleaning station, a gas supply pipe
20 disposed at least partially within the fixing guide, and an optical sensor disposed at least
partially within the gas supply pipe.

18. A method according to claim 17, wherein the fixing guide comprises one
or more purge output holes configured to discharge excess moisture from the optical
25 sensor unit to prevent sensing errors of the optical sensor unit.